

Abstract

An insert for a mold comprising a plug, having an insert face, and a receiver defined by a sidewall with one of the plug and the receiver having a groove that receives a guide that extends from the other of the plug and the receiver so as to facilitate rotation of the plug while opposing withdrawal of the plug. In one preferred embodiment, the groove has an inclined entranceway, that facilitates plug insertion and removal, and a transverse portion and extends circumferentially no more than about one and one-quarter rotation about the plug. In another embodiment, the guide is resiliently urged outwardly from the plug to ride in a groove in the sidewall and the sidewall has an access port for prying free the plug from the receiver. A detent assembly comprised of notches on the plug and a detent carried by the receiver permit the plug to be selectively indexed. The insert can be mounted to or carried by an ejector pin having a head constructed and arranged to prevent rotation of the pin during mold operation. In one preferred pin, a portion of the barrel is machined and hardened before shipment to another location, typically to an end user, where the unmachined portion is cut to length before machining the head and remainder of the barrel.